



FACT SHEET

GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S Department of Energy's Grid Deployment Office is administering a historic \$10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

UPGRADING ELECTRICAL INFRASTRUCTURE FOR RURAL ENERGY RESILIENCE

Aging and outdated infrastructure has caused approximately 400 outages in the past five years in Surry-Yadkin Electric Membership Corporation's (SYEMC) service area, hampering its ability to effectively manage distributed energy resources (DERs). This project will support a series of smart grid infrastructure upgrades including system monitoring, line replacements to increase grid capacity, and the deployment of an automated restoration system that enables the grid to quickly identify and minimize the impacts of outages.

Anticipated Outcomes and Benefits

The proposed work will deploy modern automated grid management systems with real-time monitoring capability to establish a more flexible, reliable, and resilient electric power system for its service territory and to provide a range of benefits to local communities, including:

- › Decrease the duration, frequency, and impacts of outages by 15%.
- › Reduce maintenance costs by \$2 million over the next 30 years, as a result of improved system operations.
- › Increase overall electrical system capacity by approximately 500% to support increased DER integration, ultimately decentralizing and strengthening the electrical grid.
- › Enhance the system to provide real-time electrical grid data to target damaged areas during outages.
- › Support member-driven clean energy goals, including electrical vehicle (EV) adoption, increased residential solar, and public EV charging stations.
- › Reduce wildfires and related greenhouse gas emissions caused by downed power lines by 50%–75% and reduce the likelihood of environmental damage due to aging infrastructure.
- › Generate additional employment opportunities for skilled labor and contractors.
- › Increase engagement and contracting opportunities with minority-owned businesses during the project.
- › Engage with impacted communities to solicit feedback on the project.

PROJECT DETAILS

- › **Project:**
Grid Deployment to Support Rural-Focused Resiliency at a Small-Scale Electric Co-op
- › **Applicant/Selectee:**
Surry-Yadkin Electric Membership Corporation (SYEMC)
- › **GRIP Program:**
Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- › **Federal cost share:**
\$7,486,808
- › **Recipient cost share:**
\$7,700,738
- › **Project Location:**
North Carolina
- › **Project type:**
Resilience and Sectionalization

HELPFUL LINKS

- › [Grid Resilience and Innovation Partnerships Program](#)
- › [About the Grid Deployment Office](#)